

CLAIMS:

1. A tumbler for artificially ageing the appearance of surfaces, edges, and corners of concrete blocks, said tumbler comprising:
 - 5 (a) a container having a longitudinal axis and comprising a plurality of compartments, each compartment being separated from an adjacent compartment by a partition transverse to the longitudinal axis of said container; and
 - 10 (b) a door coupled to said container, said door being movable from a first position to a second position, wherein, in said first position, said door allows the concrete blocks to be loaded into or unloaded from at least one of said plurality of compartments, and in said second position, said door maintains the concrete blocks within said at least one of said plurality of compartments such that rotation of the container about the longitudinal
15 axis causes the concrete blocks to tumble and collide with each other.
2. A tumbler as defined in claim 1, wherein each compartment has a size, the size of a first compartment being different from the size a second compartment.
- 20 3. A tumbler as defined in claim 1, wherein said container comprises a plurality of separate containers, each separate container defining a respective one of said plurality of compartments.
- 25 4. A tumbler as defined in claim 1, wherein at least one partition separating adjacent compartments is movable within said container for allowing said adjacent compartments to vary in size.
5. A tumbler as defined in claim 2, wherein, in said first position, said door allows

the concrete blocks to be loaded into or unloaded from said plurality of compartments, and in said second position, said door maintains the concrete blocks within said plurality of compartments such that rotation of the container about the longitudinal axis causes the concrete blocks to tumble and collide with each other.

6. A tumbler as defined in claim 5, further comprising an actuator coupled to said door, said actuator being operative for moving said door between said first position and said second position.

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7. A tumbler as defined in claim 6, wherein said actuator comprises a hydraulic cylinder.

8. A tumbler as defined in claim 7, wherein said door is pivotally coupled to said container and is adapted to pivot between said first position and said second position.

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9. A tumbler as defined in claim 7, wherein said door is slidably coupled to said container and is adapted to slide from said first position to said second position.

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10. A tumbler as defined in claim 8, further comprising a drive motor coupled to said container, said drive motor being operative to cause rotation of said container about the longitudinal axis.

11. A tumbler as defined in claim 10, wherein said drive motor is a hydraulic motor.

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12. A tumbler as defined in claim 10, wherein said drive motor is an electric motor.

13. A tumbler as defined in claim 8, wherein said container comprises an internal surface, said internal surface having protrusions projecting into each one of said plurality of compartments.
- 5 14. A tumbler as defined in claim 8, wherein said container further comprises an internal member extending at least partially into at least one of said plurality of compartments.
- 10 15. A tumbler as defined in claim 14, wherein said internal member comprises an external surface, said external surface having protrusions projecting into said at least one of said plurality of compartments.
- 15 17. A tumbler as defined in claim 8, wherein said container further comprises an internal shaft substantially parallel to the longitudinal axis of said container and extending at least partially into each one of said plurality of compartments.
18. A tumbler as defined in claim 17, wherein said internal shaft comprises an external surface, said external surface having protrusions projecting into at least one of said plurality of compartments.
- 20 19. An apparatus for artificially ageing the appearance of surfaces, edges, and corners of concrete blocks, said apparatus comprising:
- (a) a frame; and
- (b) a plurality of tumblers coupled to said frame, at least one of said plurality of tumblers being rotatably coupled to said frame and comprising:
- 25 (i) a container having a longitudinal axis and comprising a plurality of compartments, each compartment being separated from an adjacent compartment by a partition transverse to the longitudinal axis of said container; and
- 30 (ii) a door coupled to said container, said door being movable from a first position to a second position, wherein, in said first position,

5 said door allows the concrete blocks to be loaded into or unloaded
 from at least one of said plurality of compartments, and in said
 second position, said door maintains the concrete blocks within
 said at least one of said plurality of compartments such that
 rotation of the container about the longitudinal axis causes the
 concrete blocks to tumble and collide with each other.

10 20. An apparatus as defined in claim 19, wherein said frame comprises a base and a
 tumbler support structure pivotally coupled to said base, said plurality of tumblers
 being coupled to said tumbler support structure.

 21. An apparatus as defined in claim 20, wherein said tumbler support structure is
 adapted to pivot on said base to move sequentially each one of said plurality of
 tumblers from a first location to a second location, wherein:

15 (a) when said at least one of said plurality of tumblers that is rotatably
 coupled to said frame is at said first location, said door is in said first
 position for allowing the concrete blocks to be loaded into at least one of
 said plurality of compartments;

20 (b) during movement of said at least one of said plurality of tumblers from
 said first location to said second location, said door is in said second
 position for maintaining the concrete blocks within said at least one of
 said plurality of compartments such that rotation of said container about
 the longitudinal axis causes the concrete blocks to tumble and collide with
 each other; and

25 (c) when said at least one of said plurality of tumblers is at said second
 location, said door is in said first position for allowing the concrete blocks
 to be unloaded from said at least one of said plurality of compartments.

30 22. An apparatus as defined in claim 21, further comprising a motor coupled to said
 tumbler support structure, said motor being operative to cause said tumbler
 support structure to pivot on said base to move sequentially each one of said

plurality of tumblers from said first location to said second location.

23. An apparatus as defined in claim 22, wherein said motor is further coupled via a linkage to said at least one of said plurality of tumblers that is rotatably coupled to said frame, said motor cooperating with said linkage to cause rotation of said container about the longitudinal axis.
24. An apparatus as defined in claim 19, wherein said at least one of said plurality of tumblers that is rotatably coupled to said frame further comprises a drive motor coupled to said container, said drive motor being operative to cause rotation of said container about the longitudinal axis.
25. An apparatus as defined in claim 24, wherein said drive motor is a hydraulic motor.
26. An apparatus as defined in claim 19, wherein said at least one of said plurality of tumblers that is rotatably coupled to said frame further comprises an actuator coupled to said door, said actuator being operative for moving said door between said first position and said second position.
27. An apparatus as defined in claim 26, wherein said actuator comprises a hydraulic cylinder.